ACID COLORS

NATIONAL ANILINE & CHEMICAL CO.
INCORPORATED
NEW YORK

$25

Executive Offices of the
NATIONAL ANILINE & CHEMICAL CO., INC.
located at
40 Rector Street, New York

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ACID COLORS

SPECIAL
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NATIONAL ANILINE & CHEMICAL COMPANY, INC.

Executive Offices: 40 RECTOR STREET, NEW YORK

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Plants

BUFFALO
MARCUS HOOK

EXPLANATION

Since the publication of the previous edition of our Acid Color Card, the "National" line of Acid Dyes has been augmented by the addition of several new and important types. A revision of this work has, therefore, become necessary in order to present the subject to the trade in complete form.

In presenting this second and revised edition, the National Aniline & Chemical Company, Inc., offers an extended range of Acid Dyes, whereby the dyer can produce practically any shade desired on the fabric to which this class of dyes may suitably be applied.

Acid Colors constitute the most important group of dyes for wool, as they are used on fabrics worn almost entirely by the most critical consumers; therefore we illustrate in this volume such of this Company's products as will enable the dyer to fully satisfy the needs of the ultimate consumer, together with detailed information relative to their properties and application.

DISSOLVING ACID COLORS

The dyes herein mentioned, except our Alkali Blues, for which special directions are given, are best dissolved by pouring boiling water over them, and boiling with live steam if necessary. Soft water should be used, as hard water converts some dyes into a less soluble form, which will cause uneven dyeing.

The dye solution should be strained through cotton cloth or a fine sieve before it is added to the dye-bath. If any undissolved color remains on the strainer, it may be dissolved by pouring boiling water through it.

DYEING PIECE GOODS WITH ACID COLORS

The application of acid colors to woolen and worsted piece-goods is usually accomplished by boiling the fabric in a bath containing the dye, Glauber's Salt and a suitable acid.

The amount of Glauber's Salt required will vary according to the nature of the color and the material to be dyed. With easy leveling colors and goods not difficult of penetration, a smaller amount of Glauber's Salt is needed than with colors that do not level easily, or with goods difficult to penetrate.

Similarly with the acid; with colors dyeing easily level and on material easy of penetration, relatively large amounts of strong acid, such as Sulfuric Acid or Bisulfate of Soda may be safely used; with other colors and materials, good judgment in the choice of acid and care in its use must be exercised.

METHOD OF DYEING WITH SULFURIC ACID

Make up the dye-bath with the requisite amount of color—

10 to 20% Glauber's Salt Crystals
2 to 4% Sulfuric Acid 167° Twaddle

or

10% Glauber's Salt Crystals
10% Bisulfate of Soda

Enter the material into the hot dye-bath, bring to the boil in about one-half hour, and continue boiling for from 1 to 1¼ hours.

With deep shades, it may be necessary to add, near the end of the dyeing operation, a little Sulfuric Acid or Bisulfate of Soda in order to ensure complete exhaustion.

With goods difficult to penetrate, it is advisable to start dyeing at 120° F., with half the amount of Acid or Bisulfate recommended, adding the remainder gradually after boiling one-half hour.

METHOD OF DYEING WITH ACETIC OR OTHER ORGANIC ACIDS

Organic Acids, such as Acetic and Formic, are used with dyes which exhaust too rapidly with Sulfuric Acid, resulting in the production of uneven dyeings.

Charge the dye-bath with the requisite amount of color and—

10 to 20% Glauber's Salt Crystals
6 to 8% Acetic Acid 28%
or
10 to 20% Glauber's Salt Crystals
2 to 3% Concentrated Formic Acid

Enter the material at 105° to 120° F., bring to the boil in about ¾ hour and boil for from 1 to 1¼ hours.

If necessary, in order to exhaust the bath, additional amount of acid, well diluted, may be fed in slowly after ½ or ¾ hour's boiling.

For goods difficult of penetration the amount of Glauber's Salt may be increased to 25%, and the dyeing commenced with 5 to 10% Acetate of Ammonia, instead of Acetic Acid, the bath being exhausted after an hour's boiling by the gradual addition of Acetic Acid.

With some dyes the use of Acetate of Ammonia or Sulfate of Ammonia will be found advisable under all conditions.

With many colors requiring Acetic Acid for the production of level-dyeings, it will be found necessary to add from ½ to 1% Sulfuric Acid 167° Twaddle near the end of the operation in order to exhaust the bath.

Oxalic Acid is added in special cases in quantities of 1 to 2% of the weight of the goods to be dyed, in order to correct the lime contained in the water. The following colors are best dyed with Acetic Acid:

National Azo Yellow A 5 W
National Metanil Yellow 1955
National Cloth Red B
National Cloth Red G
National Cloth Red R
National Fast Red S Conc.
National Wool Violet 4 BN
National Buffalo Black AB
National Buffalo Black 2 AB
National Buffalo Black 4 AB
National Buffalo Black 5 AB
National Buffalo Black 6 AB
National Buffalo Black 2 AG
National Buffalo Black AR
National Buffalo Black 3G
National Durol Black B

Dyeing with the following colors should be commenced with 5 to 10% Acetate of Ammonia:

National Fast Wool Cyanone R
National Fast Wool Cyanone 3R
National Erie Scarlet B

We strongly recommend the use of from 10 to 15% Sulfate of Ammonia with

National Fast Wool Blue B
National Fast Wool Blue R
National Fast Wool Violet B

DISSOLVING AND DYEING ALKALI BLUES

Our Alkali Blues dissolve best by the following method:

Mix the dye with a very little cold water to make a smooth paste (too much water will prevent the production of a good paste). Then pour about twenty times as much boiling water by weight as color over the paste, and boil well for a few minutes. Soft water should be used. Unless this method is followed in dissolving these colors, uneven dyeings are liable to result.

The colors should be dyed as follows:

Charge the dye-bath with the requisite amount of color previously dissolved by the above method, and

1 to 2% Soda Ash
or
3 to 6% Borax

Enter the goods at about 140° F., raise the temperature in about ¼ hour to 190° F., and dye at this temperature for from ½ to ¾ hour.

Then rinse and develop the shade by working in a fresh bath containing 5% Sulfuric Acid at about 160° F., for ¼ hour, and finally rinse thoroughly.

Alkali Blues should not be dyed in vessels with copper fittings. Carbonized goods must be completely neutralized before dyeing.

No. 1 *NATIONAL QUINOLINE YELLOW* is the greenest and brightest of our Acid Yellows. It possesses excellent solubility and level dyeing properties, and is recommended for the dyeing of silk and woolen piece-goods.

No. 2 *NATIONAL CROCEINE SCARLET MOO* produces a fiery shade of excellent fastness to light and is used extensively where this quality is necessary, as for the dyeing of curtains, upholstery, bunting, etc.

No. 3 *NATIONAL AZO RUBINE EXTRA* is used for full shades of crimson and red. It levels well with Sulfuric Acid; is fast to acid, alkali and light; leaves cotton-and-silk effects white; produces a blue when after-chromed.

No. 4 *NATIONAL WOOL VIOLET 4 BN* is one of the most useful of the Acid Violets and produces full violet shades of fair fastness to light and good fastness to fulling and washing. It is best dyed with Acetic Acid but on full dyeings Sulfuric Acid may be used with safety. It is useful as a union color, as it dyes neutral, also for shading Chrome Colors as the shade is practically unchanged by chrome.

No. 5 *NATIONAL ALPHAZURINE 2G* is especially valuable on account of its excellent level dyeing properties, being one of the few colors that can be added directly to the boiling dye-bath. It is moderately fast to light, and fairly fast to washing and can be used for the shading of Chrome Colors. It is especially characterized by its bright greenish-blue shade which does not change in artificial light. It is recommended for the dyeing of silk piece-goods.

No. 6 *NATIONAL ACID GREEN L EXTRA* yields a bright shade of green fairly fast to light, and levels very well with Sulfuric Acid. It is also used as a saddening agent for blue compound shades.

No. 7 *NATIONAL BUFFALO BLACK NBR* produces a full blue-black shade. It is best dyed with Sulfuric Acid but exhausts well with Acetic Acid.

No. 8 *NATIONAL WOOL YELLOW EXTRA CONC.*, owing to its good fastness and levelling properties, is the most extensively used Acid Yellow. It is of excellent fastness to light, acid, and alkali, and moderately fast to washing. It leaves cotton-and-silk effects unstained.

No. 9 *NATIONAL ERIE SCARLET B* on account of its bright shade and good fastness to light, washing and milling is used to considerable extent for knitting yarn and in the flannel and blanket industry; is especially useful in the dyeing of unions, as wool is dyed a slightly heavier shade than cotton in a neutral bath.

No. 10 *NATIONAL WOOL RED 4OF* dyes well in heavy shades with Sulfuric Acid; is fairly fast to light and washing. It leaves cotton-and-silk effects unstained.

No. 11 *NATIONAL FAST WOOL VIOLET B* is very fast to light; the self-shade is quite fast to fulling, but is improved considerably by after-chroming. It should be dyed with Acetate or Sulfate of Ammonia; is used mostly as a shading color for blues, especially our Fast Wool Blues and similar colors.

No. 12 *NATIONAL ALPHAZURINE A* is a level dyeing brilliant greenish-blue of excellent fastness to washing and fulling. It can be used for the dyeing of all classes of woolen, worsted, and silk fabrics. After-treatment with chrome dulls the shade slightly but considerably increases the fastness to fulling.

No. 13 *NATIONAL FAST ACID GREEN B* when dyed direct produces bright bluish-greens of moderate fastness to light and alkali and fair fastness to acid and milling. It dyes well in combinations. It may be used for the shading of Chrome Colors, since chrome dulls the shade only slightly. It can also be used for printing wool and slubbing. It dyes well in a neutral bath, and finds extensive use in union dyeing.

No. 14 *NATIONAL BUFFALO BLACK AB*
No. 21 *NATIONAL BUFFALO BLACK 2AB*
No. 28 *NATIONAL BUFFALO BLACK 4AB* range in shade from deep jet-blacks to bloomy blue-blacks, in the order named. They possess excellent fastness to light and good fastness to washing. Best results are produced by dyeing with Acetic Acid.

No. 15 *NATIONAL AZO YELLOW A 5W* levels easily when dyed with Acetic Acid; is fairly fast to light and washing and fast to acid and alkali. It is an important color for the dyeing of silk and wool the same shade. It dyes in a neutral bath and is widely used in the dyeing of unions.

No. 16 *NATIONAL CLOTH RED G* possesses good fastness to washing and is used for the dyeing of loose wool, yarns, slubbing, etc. Chroming improves the fastness to milling and changes the shade only slightly.

No. 17 *NATIONAL AZO BORDEAUX* produces claret and red shades, fairly fast to light and washing, fast to acid and alkali. The most level results are obtained by dyeing with Acetic Acid.

No. 18 *NATIONAL AZO WOOL VIOLET 4B* is moderately fast to light and washing, leaves cotton-and-silk effects unstained; levels well when dyed with Sulfuric Acid. It possesses the valuable property of yielding a pure white discharge and is used largely for producing discharge-effects on woolen piece-goods, velours, plushes, etc.

No. 19 *NATIONAL ALPHAZURINE F G* levels well and is moderately fast to light and fairly fast to washing. It is fast to acid and alkali.

No. 20 *NATIONAL WOOL GREEN S* possesses good solubility and excellent level dyeing properties which makes it very valuable both as a self-shade and in combination for the dyeing of wool yarn, piece-goods, silk, as well as wool and fur felt. It is of good fastness to washing and perspiration. It can be used for the shading of Chrome Colors.

No. 21 *NATIONAL BUFFALO BLACK 2AB*—See No. 14 National Buffalo Black A B.

No. 22 *NATIONAL METANIL YELLOW 1955* is fast to alkali and fairly fast to light. It is a favorite shading product for browns, olives and blacks; should be dyed with Acetic Acid. When using Sulfuric Acid the dyed material must be well rinsed as the shade is reddened by this acid.

No. 23 *NATIONAL WOOL SCARLET BR* is very closely related in its properties to National Croceine Scarlet MOO, but possesses a bluer shade.

No. 24 *NATIONAL CLOTH RED B* possesses good fastness to milling with white wool. Used as a self-color, and for shading Chrome Colors for loose wool, slubbing, yarn, etc.

No. 25 *NATIONAL FAST WOOL VIOLET 2R* is distinguished for its very good levelling properties as well as its good fastness to alkali and light; cotton is not stained, silk only slightly. Useful for the production of Navies in combination with Acid Greens.

No. 26 *NATIONAL INDIGOTINE* is used in many cases as a cheap substitute for National Alizarine Sapphire and Alphazurines on account of its pure shade and ease of application.

No. 27 *NATIONAL WOOL GREEN B* is an Acid Green of a similar nature to National Wool Green S, but is distinguished by its brilliant bluish shade. Is of excellent solubility and dyes easily level. It can be used for the shading of Chrome Colors; silk and wool are dyed about the same shade in one bath, which recommends its use for Gloria.

No. 28 *NATIONAL BUFFALO BLACK 4AB*—See No. 14 National Buffalo Black AB.

No. 29 *NATIONAL WOOL ORANGE 2G CRYSTALS* belongs to the group of most easily levelling dyestuffs and possesses excellent fastness to light. It leaves both cotton-and-silk effects clear; is very useful for the production of mode shades.

No. 30 *NATIONAL BRILLIANT SCARLET 3R* is the brightest of our Acid Scarlets; full shades dye level and penetrate well. It leaves cotton-and-silk effects unstained, possesses very good fastness to light and washing and good fastness to acid and alkali.

No. 31 *NATIONAL FAST CRIMSON R* dyes easily level, and is fast to light. Leaves cotton-and-silk effects unstained; shade is slightly altered by chroming.

No. 32 *NATIONAL WOOL BLUE CG* produces a blue shade of moderate fastness to light and fair fastness to washing, which is slightly reddened by mineral acid and alkali. It levels well and is a desirable combination color for the production of Navies; it does not stain cotton-and-silk effects; dischargeable.

No. 33 *NATIONAL ACID FAST VIOLET BG* on account of its levelling and good penetrating properties, is especially adapted for dyeing wool-and-silk piece-goods. Silk and wool are dyed about the same shade.

No. 34 *NATIONAL WOOL NAVY B* possesses excellent level dyeing properties and is especially recommended for the production of pure Navy Blues on ladies' dress goods, and for the dyeing of knitting yarns. Leaves cotton-and-artificial-silk effects unstained.

No. 35 *NATIONAL BUFFALO BLACK 4SB*
No. 42 *NATIONAL BUFFALO BLACK 2SB*
No. 48 *NATIONAL BUFFALO BLACK SB* range in shade from bloomy blue-blacks to jet blacks. They are of superior fastness to light and washing, and leave cotton selvages unstained. Dye best with Sulfuric Acid.

No. 36 *NATIONAL CROCEINE ORANGE Y CONC.*, possesses great tinctorial power, is fast to dilute acid and alkali and fairly fast to light and washing. It is important as a shading color.

No. 37 *NATIONAL FAST CRIMSON GR* is a level dyeing acid red of excellent fastness to light. It may be used for the shading of Chrome Colors, as the shade does not alter with Chrome. Leaves cotton-and-silk effects unstained.

No. 38 *NATIONAL FAST CRIMSON 6BL* is similar in its properties to National Fast Crimson GR.

No. 39
No. 40 *NATIONAL ALIZARINE SAPPHIRE* is a true Anthracene derivative and possesses the valuable properties and characteristics of its class. It levels easily and is of excellent fastness to light, even in light shades. Its greatest value is as a combination color for mode shades on the best quality of fabrics. It leaves cotton-and-silk effects unstained.

No. 41 *NATIONAL RESORCINE BROWN RN* possesses a bright reddish brown shade. The application of this dye on wool is limited, being chiefly used for the dyeing of leather. It dyes wool and silk uniformly and leaves cotton-effects unstained.

No. 42 *NATIONAL BUFFALO BLACK 2SB*—See No. 35 National Buffalo Black 4SB.

No. 43 *NATIONAL WOOL ORANGE A CONC.*, possesses excellent level dyeing properties and is extensively used both as a self-color and for combination shades. It possesses very good fastness to light and washing and good fastness to acid and alkali.

No. 44 *NATIONAL FAST FUCHSINE G* is very fast to light, acid and stowing; moderately fast to alkali and washing. It dyes easily level and leaves cotton-effects unstained.

No. 45 *NATIONAL ACID FUCHSINE D* produces a bluish shade of red. It possesses good solubility and level dyeing properties.

No. 46 *NATIONAL ALIZARINE SAPPHIRE FS* is similar, in its properties, to National Alizarine Sapphire, but is of somewhat better fastness to perspiration.

No. 47 *NATIONAL FAST WOOL BLUE B* produces bright and medium shades of Navy. It is of excellent fastness to light and moderate fastness to washing and fulling. This color should be dyed with the addition of Sulfate of Ammonia, but Sulfuric Acid can be used to exhaust the bath. This color is largely used for dyeing men's and women's wear in the piece and leaves cotton-and-silk effects unstained.

No. 48 *NATIONAL BUFFALO BLACK SB*—See No. 35 National Buffalo Black 4SB.

No. 49 *NATIONAL BUFFALO BLACK 3G*
No. 55 *NATIONAL BUFFALO BLACK 8B*
No. 56 *NATIONAL BUFFALO BLACK 10B* are best dyed with Sulfuric Acid and produce greenish to blue-blacks of excellent fastness to light. They leave cotton selvages unstained. The last named color yields a very rich blue-black, and is especially noted for its good penetration.

No. 50 *NATIONAL WOOL ORANGE R CONC.* is similar in properties to National Wool Orange A Conc., but of a redder shade.

No. 51 *NATIONAL CLOTH RED R* belongs to the acid reds possessing good fastness to washing, and is used for the dyeing of loose wool, slubbing, etc. In order to increase its fastness to milling, the dyeing should be after-treated with Sodium Bichromate which dulls the shade slightly.

No. 52 *NATIONAL FAST FUCHSINE 6B* differs from National Fast Fuchsine G in that it produces a bluer red, levels more easily and leaves silk-effects unstained. It is useful for combination shades.

No. 53 *NATIONAL BRILLIANT WOOL BLUE N* is distinguished for its brilliancy. It is moderately fast to light and of good fastness to fulling and washing. It is of interest for the dyeing of unions as it dyes neutral and can be used for the shading of Chrome Colors.

No. 54 *NATIONAL FAST WOOL BLUE R* is similar in its properties to National Fast Wool Blue B.

No. 55 *NATIONAL BUFFALO BLACK 8B*

No. 56 *NATIONAL BUFFALO BLACK 10B*—See No. 49 National Buffalo Black 3G.

No. 57 *NATIONAL LAKE SCARLET G* is similar in its properties to National Ponceau R.

No. 58 *NATIONAL FAST RED S CONC.*, produces a brilliant red of moderate fastness to light and washing. Best results are obtained by dyeing with Acetic Acid. By reason of its marked tinctorial power, it is used for deep shades of red and claret. It is of particular importance for silk dyeing.

No. 59 *NATIONAL ACID MAGENTA N* is the bluest and brightest of our Acid Reds. Its excellent level dyeing properties and brilliancy of shade render it of interest for the dyeing of wool, woolfelt, silk and feathers. It dyes wool and silk uniformly in one operation.

No. 60 *NATIONAL ALKALI BLUE B* yields very bright blue shades of moderate fastness to light, water, washing, milling and stoving. The shade is decolorized by alkali, but restored by acid.

No. 61 *NATIONAL FAST WOOL CYANONE 3R* yields Navies fairly fast to fulling and very fast to light. It should be dyed with Acetate of Ammonia. This color is extensively used in the dyeing of serges and women's wear.

No. 62 *NATIONAL BUFFALO BLACK AR* produces a black with a violet tone, and should be dyed with Acetic Acid. As it dyes neutral, it is useful as a shading color for unions.

No. 63 *NATIONAL BUFFALO BLACK RB* is a black with a violet tone, penetrating well, and very fast to light. It should be dyed with Sulfuric Acid.

No. 64 *NATIONAL PONCEAU R* produces a bright scarlet shade of excellent fastness to light. Extensively used for upholstery and curtain materials.

No. 65 *NATIONAL CLOTH RED 2R* is similar in its properties to National Cloth Red R but somewhat bluer in shade.

No. 66 *NATIONAL RESORCINE BROWN R* dyes a yellowish-brown shade which is fairly fast to light and milling on wool. It should be dyed with Acetic Acid; wool and silk are dyed uniformly.

No. 67 *NATIONAL ALKALI BLUE R* is identical in properties with National Alkali Blue B but is somewhat redder in shade.

No. 68 *NATIONAL FAST WOOL CYANONE R* is similar in its properties to National Fast Wool Cyanone 3R.

No. 69 *NATIONAL DUROL BLACK 2B*

No. 70 *NATIONAL DUROL BLACK B* are remarkable for their very good fastness to acid, alkali, carbonizing, fulling, light and washing. They are particularly suited for dyeing knitting yarns and hosiery. Both products should be dyed with Acetic Acid. Since they dye in a neutral bath, they are suitable for wool and silk mixed goods. The latter named color produces the more jet shade.

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31822

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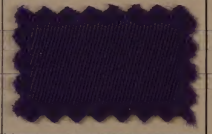
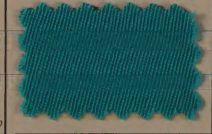
1 *National Quinoline Yellow* ½% 2%		
2 *National Croceine Scarlet MOO* ½% 1½%		
3 *National Azo Rubine Extra* ½% 1½%		
4 *National Wool Violet 4BN* ½% 2%		
5 *National Alphazurine 2G* ½% 2%		
6 *National Acid Green L Extra* ½% 2%		
7 *National Buffalo Black NBR* 5%		

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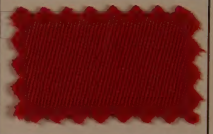
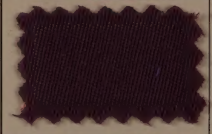
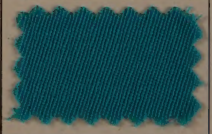
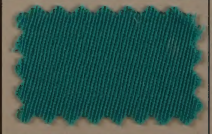
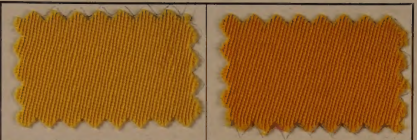
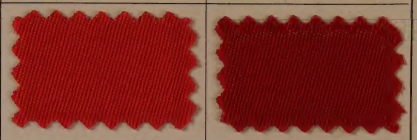
8 *National Wool Yellow Extra Conc.* ½% 1½%		
9 *National Erie Scarlet B* 1% 3%		
10 *National Wool Red 4OF* ¾% 2%		
11 *National Fast Wool Violet B* ¾% 2%		
12 *National Alphazurine A* ½% 2%		
13 *National Fast Acid Green B* ½% 2%		
14 *National Buffalo Black AB* 7%		

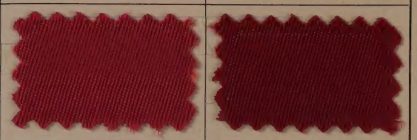
15
National
Azo Yellow
A5W
½% 1½%



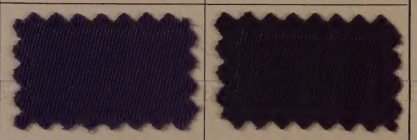
16
National
Cloth Red
G
½% 2%



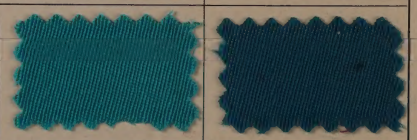
17
National
Azo Bordeaux
½% 1½%



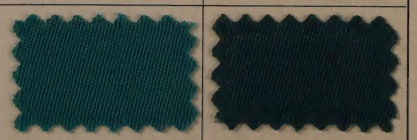
18
National
Azo Wool Violet
4B
1% 2½%



19
National
Alphazurine
FG
½% 2%



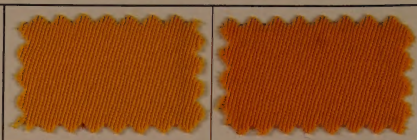
20
National
Wool Green
S
1% 3%



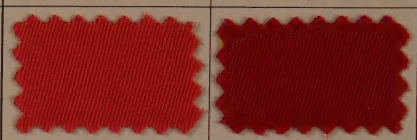
21
National
Buffalo Black
2AB
7%

NATIONAL ANILINE & CHEMICAL CO., Inc.

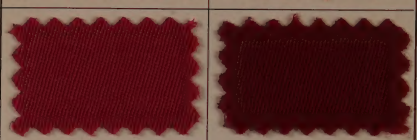
22
National
Metanil Yellow
1955
½% 1%



23
National
Wool Scarlet
BR
½% 3%

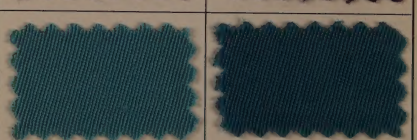


24
National
Cloth Red
B
½% 2%

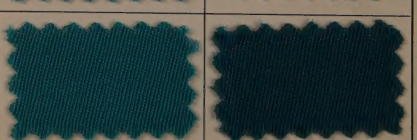


25
National
Fast Wool Violet
2R
1% 3%

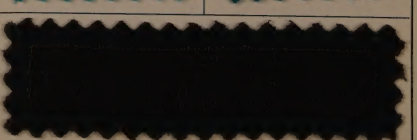
26
National
Indigotine
¾% 2%

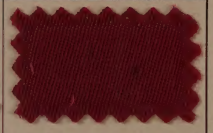
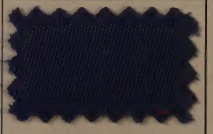


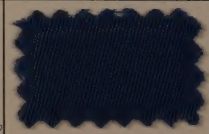
27
National
Wool Green
B
1% 3%

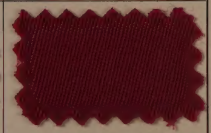
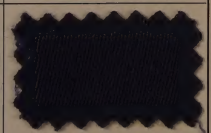
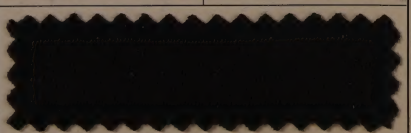
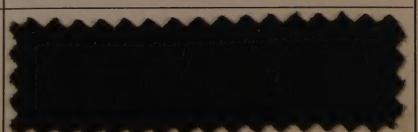


28
National
Buffalo Black
4AB
7%



29 *National Wool Orange 2G Crystals* ½% 2%		
30 *National Brilliant Scarlet 3R* ½% 2%		
31 *National Fast Crimson R* ½% 2%		
32 *National Wool Blue CG* ½% 2%		
33 *National Acid Fast Violet BG* ½% 2%		
34 *National Wool Navy B* 3% 5%		
35 *National Buffalo Black 4SB* 7%		

36 *National Croceine Orange Y Conc.* ½% 2%		
37 *National Fast Crimson GR* ½% 2%		
38 *National Fast Crimson 6BL* ½% 2%		
39 *National Alizarine Sapphire* ¼% ¾%		
40 *National Alizarine Sapphire* 1½% 3%		
41 *National Resorcine Brown RN* 1% 2½%		
42 *National Buffalo Black 2SB* 7%		

43 National Wool Orange A Conc. ½% 2%		
44 National Fast Fuchsine G ½% 2%		
45 National Acid Fuchsine D ½% 2%		
46 National Alizarine Sapphire FS ½% 2%		
47 National Fast Wool Blue B ½% 2%		
48 National Buffalo Black SB 7%		
49 National Buffalo Black 3G 5%		

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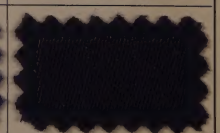
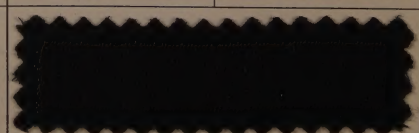
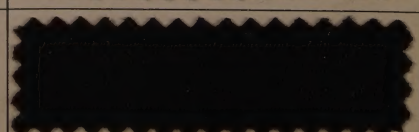
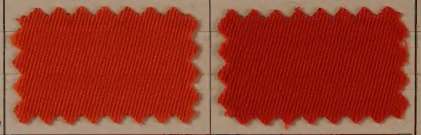
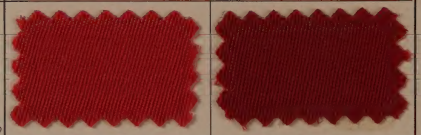
50 National Wool Orange R. Conc. ½% 2%		
51 National Cloth Red R ½% 1½%		
52 National Fast Fuchsine 6B ½% 2%		
53 National Brilliant Wool Blue N ½% 2%		
54 National Fast Wool Blue R ½% 2%		
55 National Buffalo Black 8B 5%		
56 National Buffalo Black 10B 5%		

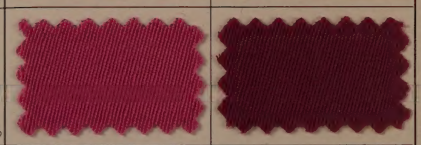
57
National
Lake Scarlet
G
1% 3%



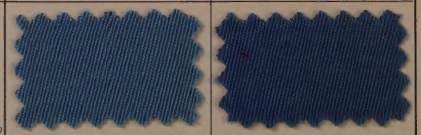
58
National
Fast Red
S Conc.
½% 2%



59
National
Acid Magenta
N
½% 2%

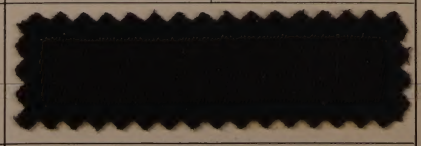


60
National
Alkali Blue
B
¼% 1%

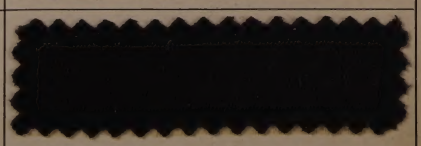


61
National
Fast Wool Cyanone
3R
1% 3%

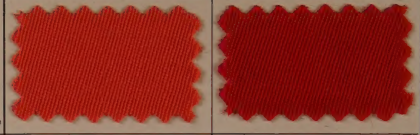
62
National
Buffalo Black
AR
7%



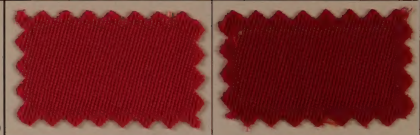
63
National
Buffalo Black
RB
5%



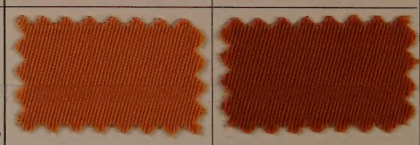
64
National
Ponceau
R
½% 3%



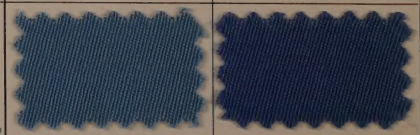
65
National
Cloth Red
2R
½% 1½%



66
National
Resorcine Brown
R
½% 2%

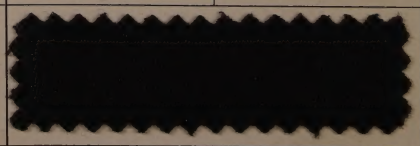


67
National
Alkali Blue
R
¼% 1%

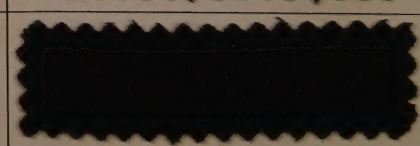


68
National
Fast Wool Cyanone
R
1% 3%

69
National
Durol Black
2B
7%



70
National
Durol Black
B
7%



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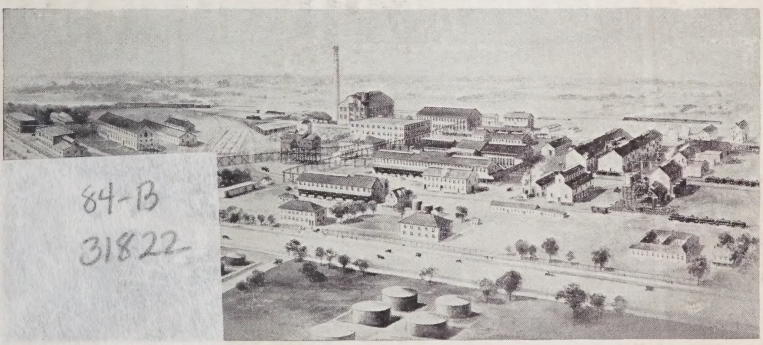
40 Rector Street, New York



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